

REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. § 1.111, and in light of the remarks which follow, are respectfully requested.

Claim 4 has been amended to correct a typographical error therein, by replacing "consisiting" with --consisting--. Claim 6 has been amended to delete "polysilanes" at line 5 (second occurrence), and to correct obvious typographical errors therein by replacing "polysiloxan" and "polysilioxane" with --polysiloxane--, and "chlorosilanes", "alkoxysilanes" and "aminosilanes" with --polychlorosilanes--, --polyalkoxysilanes-- and --polyaminosilanes--, respectively. Claim 7 has been amended to delete "for 2K constructions" and to further improve its form. Further, claim 45 has been amended to incorporate the subject matter of claim 47 and to further improve its clarity. Claim 47 has been canceled without prejudice or disclaimer. No new matter has been added.

Upon entry of the Amendment, claims 1-46 and 48-53 will be all the claims pending in the application.

Applicant notes with appreciation that claims 1-5, 8-44 and 49-51 are allowed.

I. Response to Objection to the Claims

Claim 6 was objected to for alleged informalities. Applicants respectfully submit that claim 6 as amended does not contain informalities.

In the Amendment, Applicant has amended claim 6 to replace "dimethyl polysiloxan" with --dimethyl polysiloxane--, and to delete "polysiloxane" from line 5, as suggested by the Examiner. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the objection to claim 6.

II. Response to Rejection under 35 U.S.C. § 112, Second Paragraph

Claims 6 and 7 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. Applicant respectfully submits that claims 6 and 7 as amended are not indefinite.

In the Amendment, claim 6 has been amended to replace "chlorosilanes", "alkoxysilanes" and "aminosilanes" with --polychlorosilanes--, --polyalkoxysilanes-- and --polyaminosilanes--, respectively. Claim 7 has been amended to delete the expression "2K-constructions." Accordingly, the Examiner is respectfully requested to reconsider and withdraw the § 112 rejection.

III. Response to Rejections under 35 U.S.C. §§ 102(b)/103(a)

a. Claims 45-48 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over WO 98/40425 to Sulc et al. Applicant respectfully submits that the claims as amended are novel and patentable over Sulc et al. for at least the following reasons.

Claim 45 recites an IPN comprising at least a silicone polymer composition, said IPN ... being essentially free of organic solvents.

Sulc et al. describes a composite swellable elastomer comprising a hydrophobic elastomeric component (silicone) and a hydrophilic component forming continuous or communicating matrixes.

In Sulc et al., the composite is produced by providing a hydrophobic elastomeric component and swelling it with a solution comprising the hydrophilic component and one or more solvents. Sulc et al. describes on page 5, lines 24-30, solvents including organic solvents, hydrophilic components and water. In all the examples of Sulc et al., toluene is used. It is evident that a hydrophobic material cannot be swelled by water alone and that an organic solvent is necessary. After the swelling, the hydrophilic components are cross linked and the solvent is removed (page 5, lines 3-5). Applicant advises that it will be practically impossible to remove

all of the organic solvent without damaging the material. Thus, the composite will comprise small amounts of organic solvent. Accordingly, the IPN recited in present claim 45 differs from the composite material of Sulc et al.

Moreover, the composite material of Sulc et al. comprises hydrophilic particles next to each other (see page 9, lines 21-24) which as such is not an interpenetrating network, but merely side by side arranged particles.

In view of the foregoing, Applicant respectfully submit that claim 45 is novel and patentable over Sulc et al. and thus the rejection should be withdrawn. Additionally, claims 46 and 48 depend from claim 45 and thus are patentable over Sulc et al. at least by virtue of their dependency.

b. Claims 45-47 were rejected under § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent Application Publication No. 2002/0052448 to Wang et al. Applicant respectfully submits that the claims as amended are novel and patentable over Wang et al. for at least the following reasons.

Wang et al. describes a composite material formed from a polymer, e.g., a silicone polymer which polymer is swelled by a solvent and a monomer. Wang et al. mentions in paragraph [0024], that solvent may not be necessary; however, no practical solutions are provided. Applicant advises that in practice, it has not been possible to swell a silicone to incorporate a continuous network without an organic solvent, prior to the solution presented by the present application. As mentioned above, the composite material provided by an organic solvent assisted method will comprise residues of organic solvent. Accordingly, the IPN recited in present claim 45 differs from the composite material of Wang et al.

In view of the foregoing, Applicant respectfully submit that claim 45 is novel and patentable over Sulc et al. and thus the rejection should be withdrawn. Additionally, claim 46

depends from claim 45 and thus is patentable over Wang et al. at least by virtue of its dependency.

c. Claims 45-48, 52 and 53 were rejected under § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over European Patent No. EP 0315836 to Finberg. Applicant respectfully submits that the claims as amended are novel and patentable over Finberg for at least the following reasons.

Finberg describes cross-linked polyorganosiloxane networks prepared by dispersing vinylsiloxane and silicon hydride components in a liquid monomer, cross-linking the siloxane components by hydrosilylation, and thereafter polymerizing the organic monomer, e.g., by use of peroxide. Poly-penetrating network systems may be prepared by cross-linking one or more organic polymers in the presence of the polyorganosiloxane network. At least one of the organic polymers is a vinyl or vinylidene addition polymer which may be polymerized by free radical polymerization. The polyorganosiloxane obtained by the method is relaxed interpenetrating network since no stress is introduced to the silicone due to the method of mixing the two or more interpenetrating network (See page 3, lines 29-32). Finberg mentions on page 3, lines 26-27, that the resultant polyorganosiloxane has a significantly better recovery than IPN produced by swelling methods due to the absence of stress. Finberg fails to disclose IPN which has an internal stress (low recoverability) and simultaneously is free of organic solvents. Applicant further advises that the process described in Finberg could not be used or modified to provide an IPN as recited in the present claims.

In view of the foregoing, Applicant respectfully submit that claim 45, 46, 48, 52 and 53 are novel and patentable over Finberg and thus the rejection should be withdrawn.

IV. Allowable Subject Matter

It is indicated that claims 6 and 7 would be allowable if rewritten to overcome the objections and rejection under 35 U.S.C. § 112, second paragraph.

Applicant respectfully submits that claims 6 and 7 should be allowed because the objection and the § 112 rejection have been overcome as set forth above.

V. **Conclusion**

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at his earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: April 15, 2009

By: 

Fang Liu, Ph.D.
Registration No. 51283

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620